Objective, Scope, and Methodology

The objective of our review was to evaluate GSA's revenue estimation process and answer the following questions:

- 1. What percentage are the MRGs of the FTS2001 contracts?
- 2. When are the MRGs likely to be satisfied?
- 3. What sensitivities are there in each of the estimates provided in (1) and (2)? What factors could significantly alter these estimates?
- 4. If additional competitors were permitted to compete for the FTS2001 business, how might that competition affect the estimates provided? Would reduced prices/transition costs brought about by such competition offset the impact on estimates provided?

To understand the FTS2001 program's services and its contract MRGs, we reviewed program documentation, initial program revenue projections, and copies of the contracts for FTS2001 services that were awarded to Sprint and MCI WorldCom. In examining GSA's options to add FTS2001 service providers, we also reviewed the solicitations that GSA has issued as part of its MAA program. We also interviewed GSA FTS2001 program managers and obtained other summary information on FTS2001 program implementation issues and status at the February 22, 2000, transition managers meeting in Washington, D.C., cosponsored by GSA, the Interagency Management Council, and the FTS2001 contractors.

To fully understand and evaluate the process used by GSA to estimate program revenues and time frames for satisfying revenue guarantees, we interviewed GSA FTS2001 program managers and their Mitretek Systems support staff and analyzed and documented the specific steps followed and assumptions used by Mitretek Systems to develop those analyses. In addition, we engaged forecasting and telecommunications experts from Technology Futures, Inc. (TFI), in Austin, Texas, to assist us in analyzing and evaluating the GSA revenue estimation process. To determine what factors could significantly influence those estimates, we also examined the influence of changes in pricing, expected service volumes, and program schedules.

To evaluate the reliability of GSA's program revenue estimates, we asked TFI to develop an independent estimate of potential FTS2001 program revenues, based on stated agency FTS2001 requirements and on pricing information covering the remainder of the contracts. In examining the level

Appendix I Objective, Scope, and Methodology

of growth forecast for agency demand, TFI staff observed that the outyear growth in agency data communications forecasts lagged behind commercial forecasts for the same time periods. Therefore, to evaluate the sensitivity of this factor, TFI also developed an estimate of program revenues that assumed a level of agency requirements growth more consistent with private sector trends and that at least half of this additional growth might be satisfied by the nonmandatory FTS2001 contracts.

To evaluate the forecasting methods used by agencies to estimate their FTS2001 service requirements, TFI staff joined us in conducting expert interviews at selected federal agencies. The four agencies we visited—the Departments of Defense, the Treasury, Justice, and Energy—represent a broad and sizeable range of telecommunications requirements and collectively accounted for about 46 percent of revenues billed for FTS2000 telecommunications services in fiscal year 1999. We interviewed telecommunications managers at each of the four agencies to determine how they developed their respective agencywide forecasts, including the steps they followed and the systems and technology factors they considered.

We conducted our review from January 2000 through February 2000 in accordance with generally accepted government auditing standards.

Briefing to the House Committee on Government Reform



Accounting and Information Management Division

FTS 2001: Analysis of Minimum Revenue Guarantees

Presented to

House Committee on Government Reform

March 1, 2000



Agenda

- Background
- Objective, Scope, and Methodology
- GSA Revenue Estimation Process
- Minimum Revenue Guarantees (MRGs) Relative to Total Revenues
- Timeframe for Satisfying Minimum Revenue Guarantees
- Key Factors and Sensitivities
- Potential Effects of Additional Competition
- Potential Areas for GSA Improvement



Background

- FTS2001, the successor to FTS2000, is a non-mandatory program intended to provide a range of telecommunications service to federal agencies including:
 - · Long-distance, toll-free, and 900 voice services
 - Internet and intranet-based services
 - Data communications services ranging from low-speed to very high-speed interconnections using latest technologies like Asynchronous Transfer Mode (ATM) and Frame Relay
 - Special arrangements for mission-critical users (e.g., high-availability circuits, national security and emergency users)
 - International services



Background (Continued)

- GSA has awarded contracts for FTS2001 services to:
 - Sprint on December 18, 1998
 - MCI WorldCom on January 12, 1999
- Each contract is for four base years with four one-year options, and each vendor is guaranteed minimum revenues of \$750 million over the life of the contract



Background (Continued)

- Other service providers may also offer FTS2001 services through programs such as GSA's Metropolitan Area Acquisition (MAA) program, but only when three conditions are met
 - · When allowed by law and regulation
 - After the FTS2001 contract(s) one-year forbearance period
 - When GSA determines it is in the "best interest" of the government



Objective, Scope, and Methodology

The objective of our review was to evaluate GSA's revenue estimation process and answer the following questions posed in the Committee's January 5 letter:

- 1. What percentage are the MRGs of the FTS 2001 contracts?
- 2. When are the MRGs likely to be satisfied?
- 3. What sensitivities are there in each of the estimates provided in (1) and (2)? What factors could significantly alter these estimates?
- 4. If additional competitors were permitted to compete for the FTS 2001 business, how might that competition affect the estimates provided? Would reduced prices/transition costs brought about by such competition offset the impact on estimates provided?



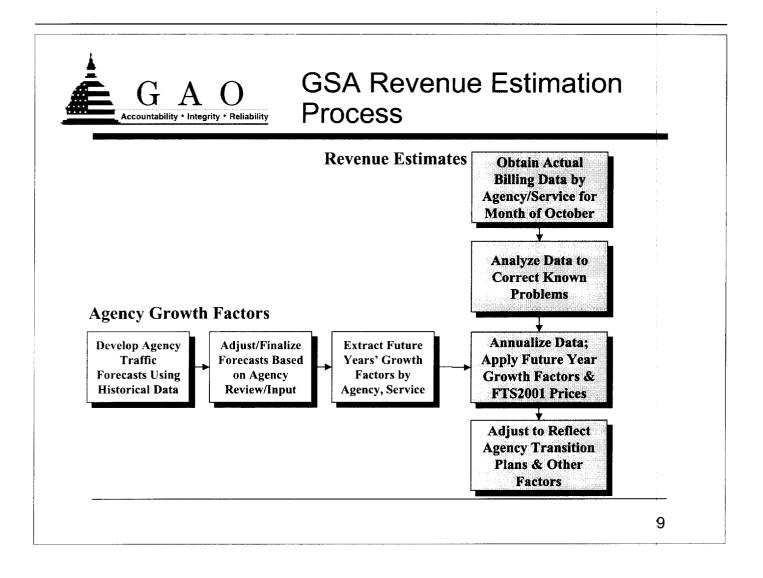
Objective, Scope, and Methodology (Continued)

- · To meet our objective, we
 - Interviewed GSA FTS2001 program managers, their Mitretek support team, and telecommunications managers in selected agencies to understand their FTS2001 forecasting processes
 - Analyzed the process and assumptions used to develop program revenue estimates and timeframes for meeting the MRGs
 - Used forecasting and telecommunications experts from Technology Futures, Inc. (TFI), to (1) assist our review of Mitretek and selected agency telecommunications forecasting processes and (2) develop an independent high-level estimate of potential FTS2001 program revenues
- We did not independently validate Mitretek's contract pricing calculations used to develop revenue estimates



Objectives, Scope, and Methodology (Continued)

We conducted our review work between January 12, 2000 and February 28, 2000 at GSA FTS offices, Fairfax, VA; Mitretek offices, McLean, VA; the Department of Energy, Germantown, MD; the Defense Information Systems Agency, Arlington, VA; and Department of the Treasury and Department of Justice offices in Washington, DC; in accordance with generally accepted government auditing standards.





Observations on Revenue Estimation Process

- The GSA/Mitretek process relies on historic and known agency requirements for FTS2001 services and works as intended to produce an estimate of program revenues
- Our independent, high-level TFI revenue forecast model using the most currently available traffic and pricing forecasts produced essentially the same revenue estimate
- For future MRG analyses, aspects of the process could be improved by:
 - Using the most current traffic and forecast data
 - · Documenting changes in data and assumptions
 - · Formalizing the process and verifying results



Process Improvement: Using Current Data

- Recent FTS2001 revenue estimates are primarily based on historical usage information that is several years old:
 - Oct. 1995 FTS2000 traffic data (adjusted in the aggregate to approximate actual Oct. 1998 traffic)
 - Agency usage growth factors developed in 1996



Process Improvement: Using Current Data

- More recent traffic data (Oct. 1998) was not used because there was insufficient time to analyze the data and translate it into usable form
- Updated agency growth factors were developed during 1999, but were only used for certain data services
- Preliminary Mitretek analysis indicates that using the more current data & growth factors increases the FTS2001 revenue estimate by about \$67 million (3 percent)



Process Improvement: Quality control

- Mitretek revenue estimation analyses are based on ad hoc processes that rely on staff to check their own work for accuracy--there was no independent verification
- For example, while reviewing these processes with us,
 Mitretek identified and corrected errors including
 - Additional features and fixed costs not included in revenue (\$260 million)
 - 8 percent GSA overhead erroneously included as revenue (\$50 million)
 - IRS 800 service revenue erroneously included for 2003 (\$20 million)



Process Improvement: Quality control

 In addition, changes to agencies' FTS2001 usage forecast submissions were not always documented, making it difficult to account for differences shown in the final forecasts used to calculate growth factors



MRGs Relative to Total Revenues

What percentage are the MRGs of the FTS 2001 contracts?

- Compared to GSA's initial estimates of contract value (i.e., more than \$5 billion) made at the time of contract award (December 1998, January 1999), the MRGs represented about one-third of estimated total program revenues
- However, when compared to GSA's February 2000 estimates of only approximately \$2.3 billion, the MRGs represent about two-thirds of estimated total program revenues



Timeframe for Satisfying MRGs

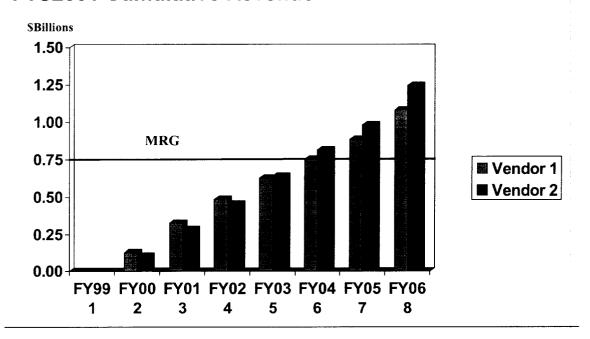
When are the MRGs likely to be satisfied?

- In January 2000, GSA and their Mitretek support team completed an analysis at our request to estimate a timetable for satisfying the FTS2001 MRGs
- This analysis is based on adjusted historical data projected for the near-term, assumes the current transition schedule, and has been adjusted to correct identified errors
- As illustrated on the next page, the corrected analysis shows the MRGs satisfied for both vendors in FY04 (contract year 6)
- But analysis results also showed that any further revenue reductions could move the MRG date out even later



Timeframe for Satisfying MRGs (Continued)

FTS2001 Cumulative Revenue





Key Factors and Sensitivities: Pricing

- FTS2001 revenues could be affected by price reductions resulting from several factors including:
 - Price management mechanisms included in the contract
 - Potential price matching for similar services between the two incumbent service providers
 - The addition of competing MAA service providers to the FTS2001 program
- Assuming demand for services remains constant, any price decreases would increase MRGs as a percentage of estimated program revenues, and therefore, increase the timeframe to meet the MRGs



Key Factors and Sensitivities

What sensitivities are there in each of the estimates provided in questions (1) and (2)?

What factors could significantly alter these estimates?

- Three primary factors could significantly alter estimates of total program revenue and corresponding timeframes for satisfying the MRGs:
 - Pricing
 - · Service demand
 - Transition progress



Key Factors and Sensitivities: Service Demand

- By relying on historic and known agency requirements, the GSA/Mitretek process produces a conservative estimate of program revenues
- We noted that forecasted growth rates in federal agency data communications services are lower than private sector trends
- TFI examined agency forecasts in light of commercial trends and completed a sensitivity analysis indicating that program revenues could be significantly higher if a more aggressive data communications growth rate were assumed



Key Factors and Sensitivities: Service Demand (Continued)

- However, given the general lack of experience under the FTS2001 program and that it is not mandatory, it is uncertain at this time how much, if any, additional growth in data communications requirements would accrue to the FTS2001 program
- Further, the largest amount of this growth would occur in the out-years of the FTS2001 program and, as a result, would not reduce the estimated MRG timeframe



Key Factors and Sensitivities: Transition Progress

- FTS2001 is currently in the second year of the base fouryear contracts, but transition to these new contracts has yet to be completed
- As of February 17, with only about 3 months remaining of the original planned 18-month transition schedule, GSA managers reported that only 26 percent of agency site transitions were complete. They expect transitions to be completed by December 2000.
- Transition delays limit the revenue accruing against MRGs
 - Current revenue estimates, which reflect agency transition schedules as of January 2000, attribute more than \$450 million in lost revenue to transition delay
 - Additional delays would further decrease program revenues and increase the timeframe to meet the MRGs



Key Factors and Sensitivities: Transition Progress (Cont.)

- GSA managers have cited several reasons for transition delay:
 - The slow pace of agency vendor selection and transition planning (vendor selections by large agencies were completed in Nov. 1999)
 - Y2K concerns that caused agencies to delay transition until after the first of the year



Key Factors and Sensitivities: Transition Progress (Cont.)

- Agencies also cite vendor issues for transition delay and failure to complete transition orders on time:
 - Poor communication between the FTS2001 service providers and agency, as well as within vendor organizations
 - Lack of agreements between the government and a prior FTS2000 vendor to support transition activities
 - Poor vendor coordination with local exchange carriers



Key Factors and Sensitivities: Transition Progress (Cont.)

- The FTS2001 program is being adversely impacted by transition delays. For example:
 - On February 3, 2000, the Office of Comptroller of the Currency (OCC) suspended its transition efforts citing vendor performance problems. However, Treasury officials responsible for managing participation in this program report that OCC has since restarted transition with its assigned vendor.
 - IRS is deferring its transition of its toll free 800 service until as late as September 2003, citing risk to their tax modernization efforts as a factor in its decision



Key Factors and Sensitivities: Transition Progress (Cont.)

- GSA and Interagency Management Council managers have been meeting with agency and vendor staff to improve transition execution
- In response, the current FTS2001 vendors are taking steps to add staff and improve service ordering and transition processes
- Further, GSA executed a transition agreement in January 2000 supporting the AT&T/MCI transition effort
- An agreement supporting the AT&T/Sprint transition effort is still pending



Potential Effects of Additional Competition

If additional competitors were permitted to compete for the FTS2001 business, how might that competition affect the estimates provided?

- Additional competition could yield price reductions, cause further transition delays, and reduce demand for services from existing FTS2001 vendors. This, in turn, would affect the estimates provided by increasing the percentage of the total contract cost that the MRGs represent and the timetable for satisfying the MRGs.
- For example, a recent GSA analysis showed that with less than a 20 percent decline in total estimated program revenue, vendor MRGs would not be satisfied until contract year 8



Potential Effects of Additional Competition (Continued)

- Transition costs: Transition cost savings would only accrue if the competitor added to the program were the incumbent FTS2000 service provider and where transition costs have not yet been incurred
- Some of these costs have already been incurred
 - For example, GSA has obligated one-third of its transition fund to date
 - Similarly, for DOD, the largest FTS2001 customer, managers told us that at this stage of transition planning and implementation, most of their transition funds have already been expended or are committed



Potential Effects of Additional Competition (Continued)

 Obligations: Reduction in revenues to current FTS 2001 service providers would increase the timeframe for satisfying contract MRGs. If the MRGs are not satisfied, GSA may be liable for additional payments to the contractors.



Potential Areas for GSA Improvement

- GSA envisioned additional FTS2001 competition in its overall FTS planning and MAA acquisition program, but any decision to add competition must consider the government's ability to meet the contract MRGs
- Given the need to closely manage FTS2001 MRGs, GSA needs to strengthen its revenue estimation process to reduce errors and improve consistency
- In addition, since MRG analysis is a key indicator in deciding when additional FTS2001 competition would be in the best interest of the government, the MRG analysis should be updated at least annually during the life of the contracts

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Potential Effects of Additional Competition (Continued)

Would reduced prices/transition costs brought about by such competition offset the impact on estimates provided?

- Not knowing what an added competitor's reduced prices might be, it is difficult to quantify the specific impact of reduced pricing on MRG timelines or obligations
- Further, to fully evaluate this offset, other factors must be considered, including:
 - · expected benefit of transition cost reductions
 - · net effect on MRG obligations